

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:11:56 ON 27 FEB 2004

=> fil .bec

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS,
ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 10:12:07 ON 27 FEB 2004
ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

11 FILES IN THE FILE LIST

=> s sulfolobus or acidocaldarius

FILE 'MEDLINE'

1110 SULFOLOBUS

429 ACIDOCALDARIUS

L1 1213 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'SCISEARCH'

1881 SULFOLOBUS

903 ACIDOCALDARIUS

L2 2071 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'LIFESCI'

906 SULFOLOBUS

391 ACIDOCALDARIUS

L3 988 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'BIOTECHDS'

374 SULFOLOBUS

177 ACIDOCALDARIUS

L4 432 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'BIOSIS'

1562 SULFOLOBUS

745 ACIDOCALDARIUS

L5 1757 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'EMBASE'

1011 SULFOLOBUS

406 ACIDOCALDARIUS

L6 1112 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'HCAPLUS'

1819 SULFOLOBUS

814 ACIDOCALDARIUS

L7 2031 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'NTIS'

37 SULFOLOBUS

14 ACIDOCALDARIUS

L8 40 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'ESBIOBASE'

687 SULFOLOBUS

238 ACIDOCALDARIUS

L9 748 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'BIOTECHNO'

880 SULFOLOBUS

323 ACIDOCALDARIUS

L10 948 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'WPIDS'

78 SULFOLOBUS

45 ACIDOCALDARIUS

L11 99 SULFOLOBUS OR ACIDOCALDARIUS

TOTAL FOR ALL FILES

L12 11439 SULFOLOBUS OR ACIDOCALDARIUS

=> s trehalose

FILE 'MEDLINE'

L13 2626 TREHALOSE

FILE 'SCISEARCH'

L14 3509 TREHALOSE

FILE 'LIFESCI'

L15 1692 TREHALOSE

FILE 'BIOTECHDS'

L16 644 TREHALOSE

FILE 'BIOSIS'

L17 4764 TREHALOSE

FILE 'EMBASE'

L18 2476 TREHALOSE

FILE 'HCAPLUS'

L19 8478 TREHALOSE

FILE 'NTIS'

L20 62 TREHALOSE

FILE 'ESBIOBASE'

L21 1324 TREHALOSE

FILE 'BIOTECHNO'

L22 1421 TREHALOSE

FILE 'WPIDS'

L23 1554 TREHALOSE

TOTAL FOR ALL FILES

L24 28550 TREHALOSE

=> s non-reducing saccharide

FILE 'MEDLINE'

3152277 NON

103777 REDUCING

1901 SACCHARIDE

L25 1 NON-REDUCING SACCHARIDE
(NON (W) REDUCING (W) SACCHARIDE)

FILE 'SCISEARCH'

722413 NON

119729 REDUCING

2402 SACCHARIDE

L26 1 NON-REDUCING SACCHARIDE
(NON (W) REDUCING (W) SACCHARIDE)

FILE 'LIFESCI'

150792 "NON"

25192 "REDUCING"
593 "SACCHARIDE"
L27 3 NON-REDUCING SACCHARIDE
("NON" (W) "REDUCING" (W) "SACCHARIDE")

FILE 'BIOTECHDS'
34574 NON
8828 REDUCING
622 SACCHARIDE
L28 17 NON-REDUCING SACCHARIDE
(NON (W) REDUCING (W) SACCHARIDE)

FILE 'BIOSIS'
625094 NON
104626 REDUCING
18339 SACCHARIDE
L29 16 NON-REDUCING SACCHARIDE
(NON (W) REDUCING (W) SACCHARIDE)

FILE 'EMBASE'
552292 "NON"
92552 "REDUCING"
1657 "SACCHARIDE"
L30 0 NON-REDUCING SACCHARIDE
("NON" (W) "REDUCING" (W) "SACCHARIDE")

FILE 'HCAPLUS'
639198 NON
295946 REDUCING
8145 SACCHARIDE
L31 16 NON-REDUCING SACCHARIDE
(NON (W) REDUCING (W) SACCHARIDE)

FILE 'NTIS'
90238 NON
26445 REDUCING
100 SACCHARIDE
L32 0 NON-REDUCING SACCHARIDE
(NON (W) REDUCING (W) SACCHARIDE)

FILE 'ESBIOBASE'
211044 NON
35021 REDUCING
725 SACCHARIDE
L33 0 NON-REDUCING SACCHARIDE
(NON (W) REDUCING (W) SACCHARIDE)

FILE 'BIOTECHNO'
130373 NON
21512 REDUCING
664 SACCHARIDE
L34 0 NON-REDUCING SACCHARIDE
(NON (W) REDUCING (W) SACCHARIDE)

FILE 'WPIDS'
1121501 NON
355630 REDUCING
7570 SACCHARIDE
L35 29 NON-REDUCING SACCHARIDE
(NON (W) REDUCING (W) SACCHARIDE)

TOTAL FOR ALL FILES
L36 83 NON-REDUCING SACCHARIDE

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=> s (l24 or l36) (8a) (synthes? or produc? or form#####) (5a) enzym?
FILE 'MEDLINE'
    445238 SYNTHES?
    1135243 PRODUC?
    1188660 FORM#####
    1030319 ENZYM?
L37      51 (L13 OR L25) (8A) (SYNTHES? OR PRODUC? OR FORM#####) (5A) ENZYM?

FILE 'SCISEARCH'
    776887 SYNTHES?
    1545827 PRODUC?
    1788036 FORM#####
    480163 ENZYM?
L38      71 (L14 OR L26) (8A) (SYNTHES? OR PRODUC? OR FORM#####) (5A) ENZYM?

FILE 'LIFESCI'
    130707 SYNTHES?
    463924 PRODUC?
    357034 FORM#####
    209674 ENZYM?
L39      47 (L15 OR L27) (8A) (SYNTHES? OR PRODUC? OR FORM#####) (5A) ENZYM?

FILE 'BIOTECHDS'
    28061 SYNTHES?
    191941 PRODUC?
    79494 FORM#####
    115152 ENZYM?
L40      58 (L16 OR L28) (8A) (SYNTHES? OR PRODUC? OR FORM#####) (5A) ENZYM?

FILE 'BIOSIS'
    603976 SYNTHES?
    1545814 PRODUC?
    1385833 FORM#####
    1699152 ENZYM?
L41      79 (L17 OR L29) (8A) (SYNTHES? OR PRODUC? OR FORM#####) (5A) ENZYM?

FILE 'EMBASE'
    546866 SYNTHES?
    1097944 PRODUC?
    1037677 FORM#####
    759333 ENZYM?
L42      42 (L18 OR L30) (8A) (SYNTHES? OR PRODUC? OR FORM#####) (5A) ENZYM?

FILE 'HCAPLUS'
    1349708 SYNTHES?
    3804585 PRODUC?
    796961 PRODN
    4195323 PRODUC?
                (PRODUC? OR PRODN)
    5335120 FORM#####
    994637 ENZYM?
L43      163 (L19 OR L31) (8A) (SYNTHES? OR PRODUC? OR FORM#####) (5A) ENZYM?

FILE 'NTIS'
    41451 SYNTHES?
    359115 PRODUC?
    282623 FORM#####
    12614 ENZYM?
L44      4 (L20 OR L32) (8A) (SYNTHES? OR PRODUC? OR FORM#####) (5A) ENZYM?

FILE 'ESBIOBASE'
    160785 SYNTHES?
    463794 PRODUC?
    382205 FORM#####

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224305 ENZYM?
L45      36 (L21 OR L33) (8A) (SYNTHES? OR PRODUC? OR FORM#####) (5A) ENZYM?

FILE 'BIOTECHNO'
      170699 SYNTHES?
      394590 PRODUC?
      318693 FORM#####
      366038 ENZYM?
L46      41 (L22 OR L34) (8A) (SYNTHES? OR PRODUC? OR FORM#####) (5A) ENZYM?

FILE 'WPIDS'
      113412 SYNTHES?
      2058020 PRODUC?
      4202984 FORM#####
      77717 ENZYM?
L47      48 (L23 OR L35) (8A) (SYNTHES? OR PRODUC? OR FORM#####) (5A) ENZYM?

TOTAL FOR ALL FILES
L48      640 (L24 OR L36) (8A) (SYNTHES? OR PRODUC? OR FORM#####) (5A) ENZYM?

=> s l48 and thermostab?
FILE 'MEDLINE'
      5920 THERMOSTAB?
L49      2 L37 AND THERMOSTAB?

FILE 'SCISEARCH'
      8074 THERMOSTAB?
L50      9 L38 AND THERMOSTAB?

FILE 'LIFESCI'
      3645 THERMOSTAB?
L51      5 L39 AND THERMOSTAB?

FILE 'BIOTECHDS'
      6374 THERMOSTAB?
L52      13 L40 AND THERMOSTAB?

FILE 'BIOSIS'
      9714 THERMOSTAB?
L53      11 L41 AND THERMOSTAB?

FILE 'EMBASE'
      10598 THERMOSTAB?
L54      6 L42 AND THERMOSTAB?

FILE 'HCAPLUS'
      18082 THERMOSTAB?
L55      13 L43 AND THERMOSTAB?

FILE 'NTIS'
      185 THERMOSTAB?
L56      0 L44 AND THERMOSTAB?

FILE 'ESBIOBASE'
      3039 THERMOSTAB?
L57      3 L45 AND THERMOSTAB?

FILE 'BIOTECHNO'
      6565 THERMOSTAB?
L58      6 L46 AND THERMOSTAB?

FILE 'WPIDS'
      4752 THERMOSTAB?
L59      3 L47 AND THERMOSTAB?

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TOTAL FOR ALL FILES

L60 71 L48 AND THERMOSTAB?

=> s l12 and (l24 or l36)

FILE 'MEDLINE'

L61 20 L1 AND (L13 OR L25)

FILE 'SCISEARCH'

L62 39 L2 AND (L14 OR L26)

FILE 'LIFESCI'

L63 14 L3 AND (L15 OR L27)

FILE 'BIOTECHDS'

L64 21 L4 AND (L16 OR L28)

FILE 'BIOSIS'

L65 29 L5 AND (L17 OR L29)

FILE 'EMBASE'

L66 10 L6 AND (L18 OR L30)

FILE 'HCAPLUS'

L67 45 L7 AND (L19 OR L31)

FILE 'NTIS'

L68 0 L8 AND (L20 OR L32)

FILE 'ESBIOBASE'

L69 16 L9 AND (L21 OR L33)

FILE 'BIOTECHNO'

L70 17 L10 AND (L22 OR L34)

FILE 'WPIDS'

L71 7 L11 AND (L23 OR L35)

TOTAL FOR ALL FILES

L72 218 L12 AND (L24 OR L36)

=> s (l60 or l72) not 1996-2004/py

FILE 'MEDLINE'

3905779 1996-2004/PY

L73 0 (L49 OR L61) NOT 1996-2004/PY

FILE 'SCISEARCH'

7846758 1996-2004/PY

L74 0 (L50 OR L62) NOT 1996-2004/PY

FILE 'LIFESCI'

867116 1996-2004/PY

L75 1 (L51 OR L63) NOT 1996-2004/PY

FILE 'BIOTECHDS'

136164 1996-2004/PY

L76 6 (L52 OR L64) NOT 1996-2004/PY

FILE 'BIOSIS'

4465844 1996-2004/PY

L77 1 (L53 OR L65) NOT 1996-2004/PY

FILE 'EMBASE'

3501804 1996-2004/PY

L78 0 (L54 OR L66) NOT 1996-2004/PY

FILE 'HCAPLUS'

7150403 1996-2004/PY

L79 3 (L55 OR L67) NOT 1996-2004/PY

FILE 'NTIS'

188994 1996-2004/PY

L80 0 (L56 OR L68) NOT 1996-2004/PY

FILE 'ESBIOBASE'

2194792 1996-2004/PY

L81 0 (L57 OR L69) NOT 1996-2004/PY

FILE 'BIOTECHNO'

931657 1996-2004/PY

L82 0 (L58 OR L70) NOT 1996-2004/PY

FILE 'WPIDS'

5912427 1996-2004/PY

L83 0 (L59 OR L71) NOT 1996-2004/PY

TOTAL FOR ALL FILES

L84 11 (L60 OR L72) NOT 1996-2004/PY

=> dup rem l84

PROCESSING COMPLETED FOR L84

L85 7 DUP REM L84 (4 DUPLICATES REMOVED)

=> d tot

L85 ANSWER 1 OF 7 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI Novel transferase and amylase production and use;
enzyme preparation for oligosaccharide and alpha,alpha-
trehalose production

AU Kato M; Miura Y; Kettoku M; Kobayashi K; Iwamatsu A; Komeda T

AN 1996-02920 BIOTECHDS

PI WO 9534642 21 Dec 1995

L85 ANSWER 2 OF 7 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI **Thermostable non-reducing
saccharide-forming enzyme;**
non-reducing partial starch hydrolyzate or **trehalose**
production using new **Sulfolobus** sp. **enzyme**
and glucoamylase or alpha-glucosidase for use as a sweetener, etc.

AU Nakada T; Chaen H; Sugimoto T; Miyake T

AN 1996-03026 BIOTECHDS

PI EP 688867 27 Dec 1995

L85 ANSWER 3 OF 7 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI Thermostable **trehalose**-releasing enzyme;
Sulfolobus acidocaldarius and **Sulfolobus solfataricus**
thermostable enzyme production and characterization,

AU Ikegami S; Kubota M; Sugimoto T; Miyake T

AN 1996-04132 BIOTECHDS

PI EP 688866 27 Dec 1995

L85 ANSWER 4 OF 7 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI **Non-reducing saccharide-forming
enzyme** and its **production** and application;
Arthrobacter sp. and **Rhizobium** sp. fermentation and **enzyme**
use in alpha-glucosyl **trehalose** **production**

AN 1994-11285 BIOTECHDS

PI EP 606753 20 Jul 1994

L85 ANSWER 5 OF 7 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI **Thermostable** amylolytic activity from **Sulfolobus**
 solfataricus;
 amylase production, purification and characterization; starch
 saccharification to glucose and **trehalose**
 SO Biotech Forum Eur.; (1991) 8, 4, 201-03
 AU Lama L; Nicolaus B; Trincone A; Morzillo P; Calandrelli V; Gambacorta A
 AN 1991-08311 BIOTECHDS

L85 ANSWER 6 OF 7 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 TI Starch conversion with immobilized thermophilic archaeobacterium
Sulfolobus solfataricus;
 glucose production from starch saccharification by thermostable
 glucoamylase
 SO Biotechnol.Lett.; (1990) 12, 6, 431-32
 CODEN: BILED3
 AU Lama L; Nicolaus B; Trincone A; Morzillo P; De Rosa M; Gambacorta A
 AN 1990-10306 BIOTECHDS

L85 ANSWER 7 OF 7 LIFESCI COPYRIGHT 2004 CSA on STN DUPLICATE 3
 TI **Trehalose** in archaeobacteria.
 SO SYST. APPL. MICROBIOL., (1988) vol. 10, no. 3, pp. 215-217.
 AU Nicolaus, B.; Gambacorta, A.; Basso, A.L.; Riccio, R.; De Rosa, M.; Grant,
 W.D.
 AN 88:92917 LIFESCI

=> d ab 4,7.

L85 ANSWER 4 OF 7 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 AB A new **non-reducing saccharide-**
forming enzyme (I) is prepared by culturing a bacterium
 of the genera Rhizobium, Arthrobacter, Brevibacterium, Flavobacterium,
 Micrococcus, Curtobacterium, Mycobacterium or Terrebacter or their
 mutants, especially Rhizobium sp. M-11 (FERM BP-4130) and Arthrobacter
 sp. Q36 (FERM BP-4316). (I) is capable of catalyzing the formation of
 trehalose-type sugars with a trehalose structure as an end unit from
 partial starch hydrolyzates of degree of glucose polymerization at least
 3. Glucoamylase (EC-3.2.1.3) and alpha-glucosidase (EC-3.2.1.20) may
 then be used to convert the product to trehalose. The trehalose-type
 sugars are useful in food, cosmetics and pharmaceuticals. (I) has
 mol.weight 76,000-87,000 (SDS-PAGE), isoelectric point 3.6 +/- 4.6 using an
 ampholyte, optimal activity at 35-40 deg and pH 6.4-7.2,
thermostability up to 35-40 deg at pH 7.0 for 1 hr; and pH
 stability of 5.5-11.0 at 25 deg for 16 hr. (I) forms alpha-glucosyl
 trehalose of formula Gn-T (where G = glucose residue, n = integer and T =
 alpha,alpha-trehalose). Alpha-glucosyl trehalose and its compositions
 are also new. (42pp)

L85 ANSWER 7 OF 7 LIFESCI COPYRIGHT 2004 CSA on STN DUPLICATE 3
 AB The non-reducing disaccharide **trehalose** (alpha
 -D-glucopyranosyl- alpha -D-glucopyranoside) was identified in
Sulfolobus solfataricus by super(13)C NMR spectroscopy. The
 screening of a range of other archaeobacteria, using a rapid isolation and
 purification procedure for **trehalose**, indicated that this
 disaccharide is present in a number of halophilic archaeobacteria,
 thermophilic and sulphur-dependent archaeobacteria and methanogenic
 archaeobacteria.

=> fil .becpat
 COST IN U.S. DOLLARS

SINCE FILE TOTAL
 ENTRY SESSION

FULL ESTIMATED COST

70.55

70.76

FILES 'BIOTECHDS, HCAPLUS, WPIDS' ENTERED AT 10:27:04 ON 27 FEB 2004
ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

3 FILES IN THE FILE LIST

=> s (160 or 172) and wo/pc and pry<=1995 and py>=2000

FILE 'BIOTECHDS'

50706 WO/PC

69726 PRY<=1995

(PRY<=1995)

80362 PY>=2000

(PY>=2000)

L86 0 (L52 OR L64) AND WO/PC AND PRY<=1995 AND PY>=2000

FILE 'HCAPLUS'

351735 WO/PC

2212883 PRY<=1995

4035312 PY>=2000

L87 1 (L55 OR L67) AND WO/PC AND PRY<=1995 AND PY>=2000

FILE 'WPIDS'

836744 WO/PC

8426999 PRY<=1995

(PRY<=1995)

3663701 PY>=2000

(PY>=2000)

L88 1 (L59 OR L71) AND WO/PC AND PRY<=1995 AND PY>=2000

TOTAL FOR ALL FILES

L89 2 (L60 OR L72) AND WO/PC AND PRY<=1995 AND PY>=2000

=> dup rem l89

PROCESSING COMPLETED FOR L89

L90 1 DUP REM L89 (1 DUPLICATE REMOVED)

=> d

L90 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

TI Cloning and expression of genes for novel transferase and amylase of
Sulfolobus and uses of the enzymes for preparing oligosaccharides

SO PCT Int. Appl., 357 pp.

CODEN: PIXXD2

IN Kato, Masaru; Miura, Yutaka; Kettoku, Masako; Iwamatsu, Akihiro;

Kobayashi, Kazuo; Komeda, Toshihiro

AN 1996:121151 HCAPLUS

DN 124:169384

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 9534642	A1	19951221	WO 1995-JP1189	19950614 <--
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W:	AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA
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RW:	KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
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AU 9526824	A1	19960105	AU 1995-26824	19950614 <--
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EP 764720	A1	19970326	EP 1995-921965	19950614 <--
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R:	CH, DE, DK, FR, GB, IT, LI
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EP 1130101	A2	20010905	EP 2000-125389	19950614 <--
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R:	CH, DE, DK, FR, GB, IT, LI
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US 6391595	B1	20020521	US 1999-298924	19990426 <--
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=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

35.07

105.83

STN INTERNATIONAL LOGOFF AT 10:31:57 ON 27 FEB 2004